

**RELATIONSHIP BETWEEN PET BEREAVEMENT, PET
ATTACHMENT AND MENTAL HEALTH (STRESS, ANXIETY
AND DEPRESSION) AMONG PET OWNERS.**



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DEPARTMENT OF PSYCHOLOGY,
Faculty of Management and Social Sciences
Capital University of Science & Technology,
Islamabad
January, 2024

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A Research Thesis submitted to the
DEPARTMENT OF PSYCHOLOGY
in partial fulfillment of the requirements for the degree of
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Certificate of Approval

It is certified that the Research Thesis titled "Relationship between Pet bereavement, Pet attachment and Mental health (stress, anxiety and depression) among Pet owners." carried out by Mahnoor Imdad, BSP201004, under the supervision of Dr. Ishrat Yousaf, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of BS Psychology.

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This work is dedicated to my parents for their endless support, love, and encouragement. I also dedicate it to the people who have lost their pets and are bereaving their loss. I am grateful for them to share their experiences with me for the research.

Declaration

This is recognized as a unique characteristic of my research unless the content and references of the text indicate otherwise. The work has not been presented for evaluation for a degree at any other university or institution, nor has it been submitted for admission to a higher education program at any other level.

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ABSTRACT

The objective of the current study is to study the relationship between pet attachment, pet bereavement and mental health (stress, anxiety and depression) among pet owners in Pakistan. Purposive sampling technique was used and a sample of 150 participants was taken from online platforms and veterinary clinics. Correlation research design was used for the research. Depression Anxiety Stress Scale (DASS), Pet Bereavement Questionnaire (PBQ), and Lexington Attachment to Pet Scale will be used. Spearman Correlation will be used to assess the relationship between the variables. The results found a positive correlation between pet attachment and mental health (stress, anxiety, depression). Pet Bereavement has a significant positive correlation with both, the Pet Attachment and Mental Health (Stress). Pet Attachment shows a significant positive correlation with Pet Bereavement and with overall Mental Health. In addition, Pet Attachment shows a positive, but statistically insignificant, relationship with Mental Health (Stress). In the Mental Health, large positive correlations are found between Mental Health and Pet Attachment, Mental Health (Depression), and Mental Health (Stress). The relationship between Mental Health (Anxiety) is positive but not statistically significant. The findings of this study can help shape the creation of specialized therapies and support services for those who have lost a pet. The research may contribute to public health initiatives that promote mental health and well-being among pet owners.

Keywords: Pet Attachment, Pet Bereavement, Mental Health, Pet loss

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Introduction

Pets hold a profound and multifaceted role in the lives of countless individuals, transcending the simplistic label of mere companions to become cherished members of families and trusted confidants (Bibbo et al., 2019). The diversity of this relationship is exemplified by the widespread inclusion of dogs, cats, birds, and fish among the most common types of pets (Alves & Rocha, 2018). Each of these species contributes uniquely to the human experience, offering companionship, entertainment, protection, and a profound sense of love that enhances the overall quality of life for their human counterparts.

Dogs, often referred to as "man's best friend," embody the epitome of loyalty and companionship. Beyond being faithful companions, they serve as sources of unwavering support, eagerly offering affection, and demonstrating an uncanny ability to understand and respond to human emotions. Their playful nature brings joy and entertainment, fostering an active lifestyle as they encourage their owners to engage in physical activities such as walks and play (Mannes, 2018).

Cats, known for their independent yet affectionate demeanor, provide a unique form of companionship. Their gentle purring and comforting presence offer solace to their owners, creating a soothing and stress-relieving environment. The playful antics of cats contribute to the entertainment of households, fostering a sense of joy and amusement (Ines et al., 2021). Birds, with their vibrant plumage and melodious tunes, bring an element of nature into homes. Beyond being visually appealing, they offer companionship through their social interactions and the ability to mimic human speech. The presence of birds can create a serene atmosphere, providing a connection to the natural world and a sense of tranquility (Peng & Broom, 2021).

Fish, while perhaps less interactive on a personal level, contribute to the ambiance of living spaces with their graceful movements and vibrant colors. The presence of an aquarium can have a calming effect, offering a form of visual entertainment and promoting a sense of relaxation (Clements et al., 2019).

In addition to companionship, pets, irrespective of their species, often play the role of family members. Their inclusion in daily routines, from shared meals to leisure activities, fosters a sense of belonging and deepens the emotional bonds within the household. The unconditional love and acceptance offered by pets create a unique familial dynamic, contributing to the overall emotional well-being of individuals (Leow, 2018).

Moreover, pets serve as confidants, offering a non-judgmental space for their owners to express emotions and thoughts. The act of confiding in a pet can be therapeutic, providing a sense of relief and comfort without the fear of criticism or misunderstanding (Roccaforte, 2019). This role as a trusted confidant enhances the emotional connection between individuals and their pets, further solidifying the bonds of mutual understanding.

Pets play a crucial role in the lives of many individuals, serving as companions, family members, and confidants. Dogs, cats, birds, and fish are among the most common types of pets, offering companionship, entertainment, protection, and love to their human counterparts. Numerous studies have demonstrated the positive impact of pet ownership on mental health and overall well-being (Barker & Dawson, 1998) and (Wells, 2007),

The emotional bond between pet owners and their furry or feathered friends is known as pet attachment. This connection encompasses feelings of love, companionship, and trust, making pets a significant source of joy and happiness for their owners. Beyond the practical benefits, such as company and pleasure, pets fulfill basic human needs by providing unconditional love and harmless physical contact through gestures like safeguarding and caressing (Barker et al., 2003; Bussolari et al., 2018).

After a demanding day, the enthusiastic greeting, adoration, and nonjudgmental support from pets often lead individuals to equate the love and support they receive from their pets to that of their spouses when they return home (Walsh, 2009). This emotional and social support offered by pet attachments is highlighted by Beck & Madresh (2008) as an essential aspect contributing to mental well-being.

However, the joy of pet ownership is accompanied by the inevitable and challenging experience of pet bereavement. Pet bereavement refers to the mourning and grief that individuals undergo after losing a beloved pet (Park et al., 2021). The emotional connection built over time can result in a profound sense of loss, with grief comparable to that experienced in human bereavement, including feelings of irritability, anger, and hopelessness, as noted by Archer (1997). Unfortunately, the distress and emotional turmoil associated with pet loss are sometimes overlooked by others, leading to a lack of support and understanding (Zizzo et al., 2020).

Literature Review

1. Pet Bereavement and Mental Health

Losing a pet is a major event that can bring about various pessimistic feelings and emotions. As per studies, losing an accomplice can impact an individual's emotional wellbeing and mental health. Rémillard and co-researchers (2017) directed a review to research the encounters of callers to a pet bereavement support hotline. As per the review, pet proprietors encountered a scope of sentiments when their companion passed on, including grief, culpability, fury, and despair. The study likewise uncovered that pet proprietors who had more intense lamenting side effects were bound to have had a profound connection with their pets and to have died because of their loss. Overall, the study features the critical effect of pet loss on the mental health and well-being of pet owners and the significance of offering sufficient help and assets to assist them with adapting to their grief (Remilard et al., 2017).

There is strong evidence on the fact that dealing with a fundamentally sick pet is connected with elevated degrees of uneasiness and distress, alongside the side effects of wretchedness and lower satisfaction with life. Furthermore, thus, the demise of a pet is associated with much more elevated levels of misery, tension, grief, and by and large poor mental health and well-being (Bussolari et al., 2017). The loss of a pet can be particularly disturbing and testing to adapt to for specific individuals, especially on the off chance that they had compelling emotional relationship to their pet. This highlights the emotional significance of pets, and how much role they can play in well-being of the pet owner (McDonald et al., 2021).

Research was done with the help of an online survey of 4336 participants who had encountered the loss of a pet in the previous year. The research included proportions of

continuing bonds, grief, sadness, tension, and personal satisfaction. The results showed that majority participants reported taking part in continuing bonds with the pets they have lost, for example, keeping photographs, talking with their pet, or feeling their pet's presence. The research additionally found that continuing bonds were positively associated with personal satisfaction and negatively associated with distress, anxiety, and depression (Habarth et al., 2017).

Another research survey was done on 365 participants who had encountered the loss of a pet. The research showed that pet loss was fundamentally connected with more elevated levels of mental distress and post-traumatic stress disorder (PTSD). Furthermore, pet loss was related with lower levels of perceived social support, which refers to the degree to which people perceive that they have support from others. The authors found that the loss of a pet can have huge mental and social consequences. The study features the significance of perceiving the profound meaning of pets and the requirement for sufficient help and assets to assist people with adapting to the loss of their pets (Hunt et al., 2008). Quackenbush and Glickman's (1984) study investigates techniques for supporting individuals in coping with the death of a pet. The study's goal was to give insights into the grief process that people go through after losing a pet and to recommend methods that social workers and healthcare experts might help people during this tough time. The researchers conducted interviews with people who had just lost a pet and studied their experiences, emotions, and coping techniques. The study's findings underscored the significant emotional effect of pet loss on people. It has been shown that losing a pet might cause a wide scope of feelings, like grief, sadness, loneliness, and even guilt. The loss of a pet generally left individuals feeling vacant and constrained them to modify their everyday habits (Glickman, 1984).

In 2017, Testoni et al. examined how pet loss affected people's perceptions of euthanasia, depression, relationships, and mortality. The study looked at the psychological

effects of losing a pet and how those effects relate to different emotional and cognitive aspects. The results showed that pet death can cause profound depression and set off intricate emotional reactions similar to those felt during a human bereavement. After losing their dogs, participants described experiencing grief, loneliness, and despair. The study also clarified the close bonds that people develop with their pets and the ways in which the loss of a pet may alter people's perspectives about euthanasia and death (Testoni et al., 2017).

2. Pet Attachment and Mental Health

Having pets encourages positive attitudes of nurturance, love, warmth, and worry for others' prosperity and it might help certain people in adapting to life changes (Walsh, 2009). Pets can serve as key attachment figures as well (Beck & Madresh, 2008). Mueller (2014) discovered a link between adult pet attachment and empathy. He discovered that those who took an active interest in caring for their dogs contributed more to the wellbeing of their society.

McDonald et al.'s (2021) studies investigated the function of pet attachment as a moderator in the mental health shifts experienced by individuals during the COVID-19 pandemic. According to the study's findings, pet attachment may have worked as a moderator in the changes in mental health patterns that occurred during the COVID-19 epidemic. Particularly, it was shown that people with higher pet attachment had more stable mental health trajectories than people who have lower pet attachment. According to the study, having a pet around and the emotional connection that was formed with it provided comfort and support throughout the challenging pandemic periods and resulted in more positive results for mental health.

The research by Tan and co-researchers (2021), studied the relationship between pet ownership, levels of physical activity, and mental health consequences. During the "circuit breaker" period, when social and movement were severely restricted, the study polled Singaporeans online to gather data. Participants reported having pets, their level of physical

activity, and their experiences with stress, anxiety, and depression. The study's results showed a connection between owning a pet and how active people were during the lockdown. Pet owners reported higher levels of physical activity than non-pet owners. The presence of pets surely encouraged and inspired individuals to engage in physical activities like walking or playing with their dogs, despite the restrictions placed by the lockdown measures. Additionally, the study found a connection between pet ownership and better mental health results during the COVID-19 lockdown. Compared to pet owners, the people who are not pet owners reported increased levels of stress, anxiety, and sadness. Animal companionship and emotional ties have been shown to positively impact people's mental health by providing solace and support through trying times.

The research by Barklam and Felisberti (2023) looks into the connection that exists between the pet ownership, welfare, and the role of pet attachment and resilience during the COVID-19 pandemic. The study aimed to study the effects of pet ownership on wellbeing outcomes during COVID-19 while accounting for the mediating effects of resilience and bonding with dogs. An online survey was used to obtain information about participant resilience, pet connection, and wellbeing indicators including life satisfaction, psychological well-being, and loneliness. The results highlighted the benefit of pet ownership on wellbeing throughout the pandemic. Pet owners reported greater levels of life satisfaction, better mental health, and lower feelings of loneliness when compared to people who are not pet owners. The study also found that resilience and a connection to pets mediated the benefits of pet ownership on wellbeing. Higher degrees of resilience and stronger attachment to pets were linked to improved results for pet owners' well-being. The findings imply that the emotional tie built between people and their dogs, as well as the resilience gained via pet ownership, played important roles in boosting wellness under the difficult conditions of the COVID-19 epidemic.

Pets offered company, support, and comfort, which improved people's overall life satisfaction and mental health.

Krause-Parello (2012) concentrated on the relationship between elderly women's wellbeing and pet ownership. According to the study, having a pet significantly helped this population's levels of loneliness and depression. Pets provide companionship, emotional support, and social support, all of which increased general wellbeing. This study emphasizes the special advantages of having a pet for older women, highlighting the value of the human-animal link in reducing feelings of loneliness and promoting emotional wellbeing in this particular group.

Through a review of the literature, Barker and Wolen (2008) investigated the advantages of human-companion animal connection. The review emphasized the benefits of connecting with companion animals on a physical and psychological level. The results showed that interaction between humans and animals can lower heart rate, blood pressure, stress levels, and increase mood. Animals in therapeutic settings have also been linked to improved social relations, decreased aggressiveness, and increased positive affect. The possibility of human-animal connection enhancing people's physiological and psychological well-being is highlighted by this study.

Hull et al., (2022) investigate the possible protective benefits of dog ownership and assistance for victimized teenagers. The purpose of the study was to see if dog ownership and social support from dogs could mitigate the negative psychological repercussions experienced by victimized teenagers. The researchers gathered data from a sample of teenagers who experienced victimization, such as bullying and peer rejection, using self-report measures. Dog ownership, perceived social support from dogs, and numerous psychological consequences such as sadness, anxiety, loneliness, and self-esteem were all measured. According to the findings of the study, dog ownership and perceived social support from dogs were connected

with improved psychological well-being among victimized teenagers. Adolescents who had dogs, in particular, reported decreased levels of despair, anxiety, and loneliness when compared to those who did not own dogs. Furthermore, greater self-esteem in victims was associated with their perception of canine social assistance.

According to the viewpoint of attachment theory, Zilcha-Mano and co-researchers (2011) investigated the conceptualization and assessment of pet attachment orientations. A dependable and legitimate way to deal with measure individuals' attachment directions towards their pets was made as a feature of the study's work to more readily grasp the idea of human-animal connections. As per the researchers' attachment theory, individuals could frame attachment joins with their canines likewise to how they do with different people. The researchers used the Pet Attachment Survey (PAQ) as a self-report measure to examine individuals' attachment directions towards their canines. The questionnaire covered attachment-related traits including intimacy seeking, separation anxiety, and secure base behaviour. The results of the study confirmed the PAQ's reliability and validity as a gauge of pet attachment orientations. The findings suggest that people may develop different degrees of connection security with their pets. The research uncovered various pet attachment patterns that resemble human attachment patterns, such as secure attachment, anxious attachment, and avoidant attachment.

Theoretical Framework

1. Attachment Theory

The first person to advocate attachment as a long-lasting psychological link between people was John Bowlby. The attachment that people feel to their pets may be understood in terms of attachment theory. Pet owners may form bonds of attachment with their animals that are similar to those formed with people, in accordance with John Bowlby's attachment theory. These relationships may influence how individuals handle their emotions and seek out assistance, as well as serving as a source of comfort and stability under stressful conditions (Bowlby, 1978). As indicated by attachment theory, understanding the emotional meaning of pets and the repercussions of friend loss on individuals' mental health and generally speaking wellbeing is conceivable. Pet owners form strong emotional bonds with their pets, viewing them as companions and sources of comfort and support. Pets, in turn, can serve as attachment figures, providing a sense of security and unconditional love. At the point when a pet passes away or gets badly sick, the loss could set off a comparative grieving interaction as when a human loved one passes away. The profundity and intricacy of grief experienced following pet loss can be better perceived by reference to attachment theory. The emotional bond framed with the pet, the dependence on the pet for emotional help, and the feeling of loss and partition all influence the grief reaction. The strength of the emotional bonds shaped with pets and the effect of their loss can be better figured out by checking out at pet loss from the perspective of attachment theory. It features the meaning of the connection among people and animals and gives a system to looking at the grief response and what pet loss means for individuals' capacity to track down comfort (Orsini, 2005).

Rationale

The level of pet owners' grieving is greatly influenced by their relationship to their pets. Highly devoted pet owners may go through more intense grieving, which may have an adverse effect

on their general well-being. Healthcare providers and mental health experts may better target their support and interventions for those who have lost a pet by having an understanding of the consequences of pet bereavement and pet attachment on mental health (stress, anxiety, and depression) among pet owners. Understanding the possible emotional repercussions of pet ownership, especially the potential impact of pet loss, can also be helpful for those who are thinking about having a pet. Despite the fact that research on pets is expanding in Western countries (Beck & Madresh, 2008; Mueller, 2014), despite the prevalence of pets in our culture, not a single study on pets or pet owners has been undertaken in Pakistan. This demonstrates the importance of studying how pet ownership impacts owners' life. Both mental health practitioners and pet owners should be aware of how losing a pet affects their mental health and wellness. Mental health professionals can use this knowledge to develop effective interventions to support pet owners who are experiencing grief and other mental health issues following the loss of a pet. Pet owners can benefit from understanding the potential impact of pet loss on their mental health and wellbeing and may be more likely to seek support when they need it. The findings of this study can help shape the creation of specialized therapies and support services for those who have lost a pet. The research may contribute to public health initiatives that promote mental health and well-being among pet owners.

Study Objectives

The objectives of this study are to investigate,

1. The relation between pet attachment and mental health (stress, anxiety and depression) among pet owners.
2. The relationship between pet bereavement and mental health (stress, anxiety and depression) among pet owners.
3. The relation between pet attachment and pet bereavement among pet owners.

Study Hypotheses

H1: There will be a positive relationship between attachment (with lost pet) and mental health (stress, anxiety and depression) among pet owners.

H2: There will be a positive relationship between pet bereavement and mental health (higher stress, anxiety and depression) among pet owners.

H3: There will be a positive relationship between pet attachment (with lost pet) and pet bereavement among pet owners.

Method

Research Design

The research design employed in this study was a correlational study. A correlational study is utilized to examine relationships between variables without manipulating them. In this case, the study aimed to explore the connections between pet attachment, pet bereavement, and mental health outcomes (stress, anxiety, and depression) among pet owners in Pakistan. The correlational design allowed for the analysis of associations without intervention, providing valuable insights into the interplay between these factors. This study was quantitative, employing statistical measures like Spearman Correlation to assess the relationships among the variables.

Population and Sample

The study focused on a population of individuals who had previously been pet owners and had undergone the experience of losing their pets. A sample of 150 participants was carefully selected based on specific criteria. The inclusion criteria involved individuals who had encountered the loss of a pet due to various reasons, including illness, accidents, adoption, or disappearance. The age criterion for participation was set at 18 years and above. Importantly, participants were included in the study regardless of whether or not they currently owned pets, emphasizing the relevance of their past experience with pet loss rather than their present pet ownership status.

Sampling Technique

The sampling technique used for this research was purposive sampling, a non-random approach in which participants were deliberately chosen based on specific characteristics or criteria relevant to the research subject. The primary aim of the study was to investigate the relationship

between pet attachment, pet bereavement, and mental health outcomes (stress, anxiety, and depression) among pet owners. Therefore, it was crucial to identify individuals who had experienced pet bereavement, as they could offer valuable insights into their attachment to their pets and its impact on their mental health. To recruit participants, various strategies were used. Local veterinary clinics in the twin cities were approached to identify potential participants. This choice was grounded in the understanding that veterinary clinics served as a suitable setting for recruitment, given that pet owners often sought professional veterinary care when their pets were ill or in need of medical attention or for regular vaccination and grooming appointments. This approach aimed to ensure that the study participants had firsthand experience with pet bereavement, contributing to the relevance and depth of the research findings.

Inclusion criteria

1. Individuals who are aged 18 years and older.
2. Individuals who have lost a pet in the past.
3. Individuals who have the ability to comprehend and read the English language.

Exclusion criteria

1. Individuals with a history of significant mental health disorders (clinically diagnosed) that could confound the results (e.g., severe depression, post-traumatic stress disorder).

Instruments

1. Demographic information sheet

All participants will complete out a socio-demographic sheet, which will ask them questions about age, gender, pet kind, and length of ownership.

2. Pet Bereavement Questionnaire (PBQ)

The Pet Bereavement Survey (PBQ) was developed by Hunt and Padilla in 2007. The PBQ was employed as a 16-item self-report measure designed to evaluate grief and the grieving

process experienced by individuals following the loss of a pet. In this survey, participants were required to rate each item on a 5-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree).

The PBQ demonstrated a high level of internal consistency reliability, as evidenced by a Cronbach's alpha coefficient of 0.87. This suggested that the survey items were consistently measuring the construct of interest, enhancing the instrument's overall reliability.

Additionally, the PBQ exhibited convergent validity, establishing its correlation with various scales measuring pet attachment and pet loss. This correlation highlighted the PBQ's ability to capture grief experiences in a manner consistent with other established measures in the field.

3. The Depression Anxiety Stress Scale (DASS)

The Depression Anxiety Stress Scale (DASS), a 21-item measure, was the abbreviated version of the initial DASS scale developed by Lovibond and Lovibond in 1995. The DASS-21, used as a self-report measure in this study, consisted of 21 questions distributed evenly across three subscales: Depression, Anxiety, and Stress. Participants rated using a 4-point Likert scale ranging from 0 (do not apply to me at all) to 3 (applied to me very much or most of the time). The DASS-21 demonstrated excellent construct validity and cross-cultural validity, indicating its ability to measure the intended psychological constructs accurately across diverse populations. Furthermore, it was noted for its strong associations with different versions of the DASS and other established assessment measures. The reliability and validity of the DASS-21 underscored its utility as a reliable tool for assessing and quantifying levels of depression, anxiety, and stress in individuals, providing valuable insights into the mental health aspects of the study participants.

4. Lexington Attachment to Pet Scale

The Lexington Attachment to Pet Scale (Johnson, Garrity, and Stallones, 1992) was employed in this study to evaluate participants' attachment to their pets. This scale consisted of

a 0-3 Likert scale, where higher scores indicated more profound feelings of attachment to their pets. The scale demonstrated excellent internal consistency, as indicated by a high Cronbach's alpha coefficient of 0.96. This suggested that the items in the scale consistently measured the concept of attachment, contributing to the instrument's overall reliability.

Additionally, the Lexington Attachment to Pet Scale exhibited strong construct validity, reinforcing its effectiveness in accurately assessing the various facets of attachment to pets

Procedure

Participants in the study were recruited through veterinary clinics in the twin cities. Comprehensive information about the study, including its objectives and the voluntary nature of participation, was provided to potential participants. Informed consent was obtained from those who expressed interest in taking part. Once participants provided their consent, they were asked to complete a series of self-report measures.

The survey included demographic questions designed to gather information about participants' age, gender, pet ownership history, and previous experiences of pet bereavement. To assess mental health outcomes, participants completed the Depression Anxiety Stress Scale (DASS-21). This widely used scale measured symptoms of depression, anxiety, and stress, providing reliable and valid scores for each construct.

The Pet Bereavement Questionnaire, a validated measure specifically designed to assess grief and bereavement experiences related to pet loss, was administered. This questionnaire captured various aspects of grief, including emotional responses, coping strategies, and changes in daily functioning. To assess pet attachment, participants completed the Lexington Attachment to Pet Scale (LAPS), a reliable and validated instrument measuring the strength of the emotional bond between individuals and their pets. The LAPS included items assessing emotional closeness, dependence, and the sense of security derived from the pet-owner relationship. All collected data were treated with strict confidentiality and

anonymity, and the filled questionnaires ensured secure data transmission and storage. Once the data collection period was complete, the collected data were analyzed using appropriate statistical techniques to explore the relationships between pet attachment, pet bereavement, and mental health outcomes among pet owners.

Ethical Considerations

Ethical considerations played an important role in this research. A dedication to upholding ethical principles was crucial in ensuring the protection of the rights and well-being of research participants. Following the ethical guidelines outlined by the American Psychological Association (APA), the study addressed several key considerations.

First and foremost, all participants were approached to provide informed consent. Interested volunteers received clear and comprehensive information about the study's objectives, methods and risks before deciding to participate. They were explicitly informed of their right to decline participation or withdraw from the study at any time. Informed consent was obtained to ensure that participants had a thorough understanding of the study and willingly consented to participate. Throughout the study, confidentiality and anonymity were rigorously maintained. Personal information and survey responses provided by participants were kept strictly confidential. To safeguard participant anonymity, identifying information was kept separate from the collected data. The data were accessible only to the researcher, ensuring that participant privacy was upheld. The study took an ethical approach to participant diversity and inclusivity. Participants from various age groups, genders, ethnic backgrounds, and socioeconomic positions were actively encouraged to participate. The overarching goal was to ensure that the study's findings were applicable to a larger community of pet owners.

This approach aimed to contribute to a more comprehensive understanding of the topic by considering the diversity within the sample, reflecting a commitment to inclusivity and representation in research.

Data Management and Analysis

In this study, data were collected through a questionnaire and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive analysis was employed to determine the mean, standard deviation, Cronbach's alpha, skewness, and kurtosis. Additionally, Spearman correlational analysis was utilized to explore the relationships between the variables of interest: pet attachment, pet bereavement, and mental health outcomes (stress, anxiety, and depression). The Spearman correlation was instrumental in examining how levels of pet attachment and experiences of pet bereavement related to the mental health outcomes reported by participants. This approach allowed for a comprehensive understanding of the relation between these variables, shedding light on potential associations and contributing valuable insights to the study's objectives.

Results

The primary objective of the current study was to investigate three key relationships among pet owners. Firstly, the study aimed to explore the connection between the attachment to a lost pet and the mental health of pet owners, specifically focusing on stress, anxiety, and depression. Secondly, it sought to understand the relationship between the experience of pet bereavement and the mental health outcomes, with a particular emphasis on higher levels of stress, anxiety, and depression among pet owners. Lastly, the study intended to examine how pet attachment (with a lost pet) relates to pet bereavement among pet owners. Data were collected from a sample of 150 young adults residing in Islamabad and Rawalpindi, and a comprehensive analysis followed. Descriptive statistics were employed to summarize and understand the main features of the data, while reliability measures were assessed to ensure the consistency of the collected information. Spearman correlation, a statistical method suitable for non-parametric data, was utilized to examine the relationships between the variables. Before applying these analytical methods, a thorough evaluation of the data's characteristics was conducted. Skewness, kurtosis, and Kolmogorov-Smirnov tests were employed to assess the normality of the data distribution. The analysis revealed that the data exhibited a non-normal distribution, indicating that the assumptions of normality were not met. This study not only aimed to uncover the relationships between pet attachment, pet bereavement, and mental health but also meticulously considered the characteristics of the collected data. The non-normal distribution highlighted the uniqueness of the dataset, prompting the use of appropriate statistical techniques to draw meaningful conclusions about the relationships under investigation.

Analysis

The statistical analyses undertaken in this study encompassed several key components. First and foremost, there was an examination of demographics, exploring factors such as age, gender, and other pertinent variables. This information was presented and discussed in detail in Table 01. Subsequently, a descriptive analysis was performed on the study variables to elucidate their individual characteristics. This involved calculating measures such as mean, standard deviation, and frequency distributions to provide a comprehensive understanding of the data. The findings regarding the descriptive characteristics of each variable were then compiled and presented in Table 02. To assess the reliability of the measurement scales employed in the study, a reliability analysis was carried out, focusing on calculating the alpha reliability coefficient. This coefficient, commonly known as Cronbach's alpha, indicates the internal consistency of the scales, ensuring that the measurements consistently assess the same underlying constructs. The results of this reliability analysis provided insights into the dependability of the study's measurement tools. Furthermore, a correlation analysis was conducted to delve into the relationships between the variables under study. This involved exploring how different variables were associated with each other, providing valuable insights into potential connections and dependencies within the dataset. These statistical analyses played a crucial role in examining the demographics, characteristics of study variables, reliability of measurement scales, and relationships between variables. The findings from these analyses collectively contribute to a comprehensive understanding of the study's objectives and insights into the data under consideration.

Table 01

Demographic Characteristics of Sample (N=150)

Demographic Variables	Frequency	
Age		
18-25	72	48
26-40	74	49.33
41-43	04	2.66
Gender		
Male	55	36.7
Female	95	63.3
No. of Pets Owned		
Pet Bereavement		
Yes	150	100
No	0.00	0
No. of Pets lost		
1-4	137	91.33
4-8	13	8.67
Duration of most recent Bereavement		
0-6 months	26	17.3
6-12 months	95	63.3
1-2 years	25	16.7
2-5 years	04	2.7

With a sample size of 150 individuals, Table 1 presented the demographic characteristics of the study participants. The mean age of the participants was 26.54 years, with a standard deviation of 6.16 years, indicating a relatively young and diverse sample.

In terms of gender distribution, the study included 55 male participants (36.7%) and 95 female participants (63.3%). The gender distribution suggested a higher representation of females in the sample, with women comprising a larger proportion of the participants. This gender imbalance needed to be considered when generalizing the study findings to the broader population. On average, participants reported owning 2.54 pets, with a standard deviation of 1.33. The number of pets owned provided insight into the prevalence of pet ownership within the sample, aiding in understanding the potential impact of pet-related variables on the study outcomes.

Concerning pet bereavement, all 150 participants (100%) reported experiencing pet loss, with none indicating no pet bereavement. This suggested that pet bereavement was a universal experience within the sample. Furthermore, the average number of pets lost was 2.54, indicating that, on average, participants had lost around two pets. The duration of the most recent pet bereavement was reported as 2.05 years, with a standard deviation of 0.66 years, providing insight into the recency of these experiences.

Overall, the demographic characteristics of the sample revealed a diverse group of individuals with a significant representation of females. The prevalence of pet ownership and the universal experience of pet bereavement within the sample underscored the relevance of investigating the psychological and emotional impact of pet loss on individuals.

Table 02

Psychometric properties of Study Variables (N=150)

Variables	k	M	SD	A	Range		Skewness	Kurtosis
					Actual	Potential		
Pet Bereavement	16	48.94	9.00	.92	16-64	16-80	-1.13	1.93
Pet Attachment	23	45.12	4.29	.56	25-84	23-92	-3.21	18.43
Mental Health	21	13.73	5.18	.89	24-60	0-63	.45	1.19

Note. M= Mean; S.D.= Standard Deviation; α = Cronbach alpha reliability; k= no. of items.

With a sample size of 150 participants, the results of the descriptive analysis indicated that the skewness and kurtosis were beyond the normal range, signifying a departure from a normal distribution. This suggested that the data deviated from the typical bell-shaped curve and exhibited non-normal distribution characteristics. Descriptive statistics, including mean, standard deviation, potential range, and actual range, were reported, offering insights into the central tendency and variability of the gathered data. The Cronbach's alpha reliability coefficients for the Pet Bereavement and Mental Health scales were reported as reliable and acceptable, surpassing the commonly recommended threshold of $\alpha = 0.70$. However, the Pet Attachment scale exhibited a moderate level of reliability, with a Cronbach's alpha value of $\alpha = 0.56$. This indicated a slightly lower level of internal consistency reliability for the Pet Attachment scale. Researchers typically aim for a Cronbach's alpha of at least 0.70 to ensure the reliability of their measurement scales. The moderate reliability of the Pet Attachment scale suggests caution in interpreting results and prompts consideration of potential implications for the validity of the scale. Spearman product moment correlation was used to explore the relationships among variables. Hypotheses were formulated, anticipating a positive relationship between attachment to a lost pet and mental health among pet owners, a negative relationship between pet bereavement and mental health, and a positive relationship between attachment to a lost pet and pet bereavement. These hypotheses were tested through correlation analysis, the results of which are reported in Table 03.

This analytical approach allowed for an in-depth investigation of the complex relationship between pet attachment, pet bereavement, and mental health among pet owners. The findings provided valuable insights into the emotional experiences associated with the loss of a beloved companion animal and their potential impact on mental well-being.

Table 03

Relationship between Pet Bereavement, Pet Attachment, and Mental Health (N=150)

Variables	1	2	3	3a	3b	3c
1 Pet Bereavement	-	.28**	.10	-.05	.02	.20**
2 Pet Attachment		-	.25**	.17*	.27**	.18
3 Mental Health			-	.88**	.82	.68**
3a Mental Health(Depression)				-	.67	.50*
3b Mental Health(Anxiety)					-	.45**
3c Mental Health(Stress)						-

Note. N= 150; *p < .05. **p < .01

The results revealed a positive correlation between pet attachment and mental health (stress, anxiety, depression). Pet bereavement demonstrated a significant positive correlation with both pet attachment ($r = 0.288$, $p < 0.01$) and mental health (stress) ($r = 0.206$, $p < 0.01$). The positive correlation between pet attachment and pet bereavement was also significant ($r = 0.288$, $p < 0.01$), along with a substantial positive correlation between pet attachment and overall mental health ($r = 0.833$, $p < 0.01$). Additionally, pet attachment displayed a positive association, though statistically insignificant, with mental health (stress) ($r = 0.182$, $p > 0.05$). In the realm of mental health, substantial positive correlations were found between mental health and pet attachment ($r = 0.883$, $p < 0.01$), mental health (depression) ($r = 0.820$, $p < 0.01$), and mental health (stress) ($r = 0.688$, $p < 0.01$). However, the relationship between mental

health (anxiety) was positive but not statistically significant ($r = +0.688$, $p > 0.05$). These findings provided valuable and detailed information on the dynamics between pet bereavement, pet attachment, and various dimensions of mental health, contributing to an improved understanding of this area.

The positive correlations highlight the interconnectedness of pet attachment, pet bereavement, and mental health outcomes. These detailed insights enhance our comprehension of the complex relationships within the context of pet ownership and loss, shedding light on the psychological implications for individuals who have experienced pet bereavement.

Chapter 05

Discussion

In the study conducted, we explored three main aspects related to pet ownership and its potential effects on mental well-being. Firstly, we examined how the attachment to a lost pet was related to the mental health of pet owners, specifically looking at stress, anxiety, and depression. Our goal was to understand the emotional connections people form with their pets and how these connections might influence their overall mental health. The second aspect of the study focused on the relationship between pet bereavement and mental health outcomes. We specifically looked at whether individuals who experienced the loss of a beloved pet showed elevated levels of stress, anxiety, and depression. This part of the study aimed to provide insights into the psychological impact of pet loss on the mental health of pet owners. Lastly, we investigated how the attachment to a lost pet was connected to the experience of pet bereavement among pet owners. This analysis aimed to uncover the relationship between the strength of attachment to a deceased pet and the grieving process, providing a comprehensive understanding of how individuals cope with the challenges of losing a pet. The study sought to

unravel the complex interplay between human-animal bonds, the emotional experience of pet loss, and the resulting implications for mental health. By addressing these dimensions, the research aimed to contribute valuable insights to the existing knowledge in the field, offering a better understanding of the emotional landscapes that individuals navigate in the context of pet ownership and bereavement. The findings could potentially inform support strategies and interventions tailored to individuals who have undergone the unique challenges associated with losing a beloved animal companion. The study involved the collection of data from a sample of N=150 young adults who met specific criteria: they had experienced the loss of a pet due to reasons such as illness, accidents, adoption, or disappearance, and they were aged 18 and above. The data collected was analysed using the Statistical Package for the Social Sciences (SPSS, version 21). All participants in the study were educated and had proficiency in English, ensuring their comprehension of the scales employed in the research. The demographic characteristics of the sample are detailed in Table 01. Descriptive statistics, including mean, median, mode, and frequency, were analyzed. This analysis aimed to offer insights into the central tendency and distribution of the variables under investigation. Moreover, the normality of the data was assessed using skewness and kurtosis values. The identification of skewness and kurtosis values exceeding ± 1 indicated a non-normal distribution of the data, providing crucial information about the statistical properties of the dataset. Additionally, a reliability analysis of the data was conducted using Cronbach's Alpha. This statistical measure assesses the internal consistency of the scales employed in the study. It ensures that the items within each scale consistently measure the same underlying construct. The reliability analysis adds an additional layer of validity to the study, enhancing confidence in the accuracy and consistency of the collected data. The data collected from the sample of young adults who experienced pet loss underwent thorough analysis, involving descriptive statistics and checks for normality. The reliability of the data was also evaluated using Cronbach's Alpha. The Spearman correlation

coefficient used as a descriptive statistic played a crucial role in examining features within our dataset. Specifically, it provided a measure of the strength and direction of the linear relationship between two quantitative variables. Our correlation analysis aimed to test the hypothesis of the study. Upon analyzing the data, the study's results uncovered compelling evidence to support our first hypothesis. This hypothesis posited a positive correlation between pet attachment and mental health outcomes among pet owners. The established association was not only positive but also statistically significant, indicating a meaningful relationship between the two variables. This significant correlation highlights the profound psychological impact of attachment to pets. Individuals who formed strong emotional bonds with their deceased pets were found to be more susceptible to heightened levels of stress, anxiety, and depression, as indicated by previous research (Brooks et al., 2018; Sable, 1995; Sable, 2013; Testoni et al., 2017). This finding underscores the importance of attachment as a potent source of emotional response, even in relationships with nonhuman companions. The detailed analysis using the Spearman correlation coefficient provided evidence supporting the hypothesis, emphasizing the crucial role that attachment to pets plays in influencing mental health outcomes among pet owners. This insight contributes to our understanding of the intricate interplay between human emotions and their relationships with nonhuman companions. The empirical support for this hypothesis aligns with prior research emphasizing the therapeutic and supportive role of pets for their owners (Cryer et al., 2021; Julius et al., 2012; Wilkes, 2009). Undoubtedly, the demise of a pet can evoke profoundly emotional responses similar to those experienced in human relationships (Applebaum et al., 2021; Ross & Baron-Sorensen, 1998; Ross, 2013). The notably high positive correlation identified between pet attachment and mental health outcomes underscores the critical importance of comprehending the emotional dimensions associated with pet ownership. It also sheds light on the potential psychological impacts of pet loss on individuals who have developed close emotional bonds with their pets. In essence, the findings

from this study contribute to a growing body of knowledge that recognizes the intricate emotional connections formed between individuals and their pets. The observed correlation emphasizes the crucial role that pets play in the emotional well-being of their owners and underscores the need for a deeper understanding of the complex dynamics involved in the human-animal bond. The study further highlights the potential challenges posed by pet loss, urging consideration of the psychological implications for those who have developed strong emotional ties with their animal companions. The second hypothesis, which suggested a positive link between pet bereavement and mental health, received strong support from the study's findings. The research revealed a clear positive connection between pet bereavement and mental health indicators like stress, anxiety, and depression. This showed how losing a pet affects people emotionally and psychologically. Those experiencing pet bereavement were found to be more likely to face heightened levels of psychological distress, as seen in previous studies (Applebaum et al., 2020; Ikeuchi et al., 2021). The study's results emphasized the importance of providing personalized interventions and support services for individuals grieving the loss of their pets. The observed positive relationship highlighted the vulnerability of people going through pet bereavement, emphasizing the need for tailored assistance to address their unique emotional needs. Understanding the emotional bonds between individuals and their pets, the study underscored the significance of offering compassionate and targeted support to alleviate the psychological impact of pet bereavement. The strength of the association between pet bereavement and mental health outcomes underscored the urgency of recognizing issues related to animal loss as crucial and deserving attention. The study suggested that addressing the psychological distress linked to pet bereavement should be a vital aspect of mental health support systems. In summary, the study provided valuable insights into the emotional complexities following the loss of a beloved pet, advocating for empathetic and customized interventions to help individuals cope with the challenges of pet bereavement.

Contrary to the initial hypothesis, there was no positive correlation observed between pet attachment and pet bereavement. This unexpected finding suggests an intriguing idea that the intensity of grief in humans may not be directly reflected by the level of attachment to their pets. The absence of a strong correlation points to the nuanced and complex nature of the relationship between attachment and bereavement, hinting that other factors may play a significant role in the grieving process related to pets. The study discovered that how much someone is emotionally attached to their pet doesn't necessarily predict how intense their grief will be when the pet is lost. The unexpected result suggests that grieving for a pet is influenced by various factors beyond just emotional attachment, making the connection between attachment and bereavement more intricate and less straightforward than initially thought. The profound connection between humans and animals prompted a natural bereavement process characterized by rituals, ceremonies, guilt, and sadness. The intensity of grief experienced by individuals was also linked to the quality of their support systems, either alleviating or exacerbating the grieving process (Wanser et al., 2019). In collectivist cultures like Pakistan, where strong social support is prevalent, the experience of bereavement was not only potentially lower but also manifested differently compared to cultures with less communal support (Inman et al., 2007; Altun, 2020). Another noteworthy aspect pertained to the contrast between how pet owners desired to perceive their loss and society's perception of the significance of that loss. Research by Eckerd et al. (2016) highlighted how individuals wanted to feel about the loss of their pets and how society at times downplayed the importance of such losses. In simpler terms, the emotional bond shared between people and their pets naturally led to a process of navigating loss, encompassing various emotional experiences. The strength and nature of this bereavement journey were influenced by the level of support available to individuals. In cultures like Pakistan, where community support is strong, the grieving process tended to be less intense and manifested differently. Additionally, a notable discrepancy existed

between how pet owners wished to emotionally process their loss and how society perceived the significance of these losses. It was demonstrated that disenfranchised grieving, resulting from societal restraints, had a tangible impact on the bereaved, leading to adverse outcomes such as increased anxiety, sadness, somatization, and functional impairment (Bussolari et al., 2021). Even when the owner was involved in the euthanasia procedure, these grief reactions proved to be complex. Studies in this review consistently found a strong correlation between a deep connection with pets and heightened feelings of grief and rage among owners whose pets underwent euthanasia (Barnard-Nguyen et al., 2016). Although the hypothesized link did not receive statistical support, the absence of a significant correlation encourages further exploration of various aspects of pet attachment and bereavement. Looking ahead to future research, it becomes crucial to delve into specific individual differences, coping strategies, and contextual factors that play a role in determining the grieving process for pet owners. The study demonstrated that when societal constraints limit the grieving process, it can have tangible negative effects on individuals, leading to increased feelings of anxiety, sadness, and impairment. Even when owners are involved in euthanasia, the grief experienced is complex, especially for those with a strong connection to their pets. While the initial hypothesis wasn't statistically supported, it suggests the need for more research into different aspects of pet attachment and how people cope with bereavement. Future studies could focus on understanding individual differences, coping strategies, and other factors that influence how pet owners grieve.

Conclusion

The research studied the various dimensions of the relationship between the pet attachment, the pet bereavement as well as the mental health of young adults who have recently lost their pets. The results found a positive correlation between pet attachment and mental health (stress, anxiety, depression). Pet Bereavement has a significant positive correlation with

both, the Pet Attachment and Mental Health (Stress). Pet Attachment shows a significant positive correlation with Pet Bereavement and with overall Mental Health. In addition, Pet Attachment shows a positive, but statistically insignificant, relationship with Mental Health (Stress). In the Mental Health, large positive correlations are found between Mental Health and Pet Attachment, Mental Health (Depression), and Mental Health (Stress). The relationship between Mental Health (Anxiety) is positive but not statistically significant. The findings reveal the need for working within the whole spectrum of individual peculiarities; coping strategies and cultural background also play a crucial role towards how grief turns out after a pet loss.

Recommendations

Future research should examine the relationships between the varieties of personality traits, the styles of attachment, and the depth of pet loss reactions. Acknowledging the contribution of such factors as neuroticism and emotional regulation or grief rituals to potentially burdening or relieving grieving can bring the valuable findings to light. Since we have communities with various traditions and cultural expressions, generalized studies that are cross-cultural and involve comparison and contrast of pet bereavement experiences in these societies will be valuable. In the future research, it would be beneficial to use larger and more diversified samples because this will expand the generalizability. Moreover, integrated methods that link qualitative and quantitative data not only help to examine an individual's experience better but also enable a perfect analysis. We can further widen the scope of the research by trying to establish if modified by factors of those biopsychosocial, like hormonal changes or physical symptoms of grief, may play a role as contributing factors to the grief process.

Limitations

R on self-report measures opens the door to response bias and subjective interpretations. Participants may give socially desirable responses or have difficulty recalling describing their attachment to their pets, grieving experiences, and mental health symptoms appropriately. The use of self-report measures may also limit the objectivity and validity of the data collected. Second, using purposive sampling to select people who have lost a pet can cause selection bias. The sample might not accurately reflect the wide variety of pet owners and their experiences, limiting the findings' generalizability to the wider population. Lastly, pet owners who have frequent access to veterinary services may be a segment of the population, often with a higher socioeconomic position and a stronger devotion to pet care. This restriction may generate selection bias since it excludes those with little income or who reside in remote places with restricted access to veterinary clinics. As a result, the findings may not fully represent the experiences and mental health effects of a variety of pet owners, particularly those with financial constraints or living in marginalized neighborhoods. Furthermore, concentrating on pet owners with access to veterinary facilities may accidentally overlook the perspectives of people who rely on alternative healthcare professionals or unconventional approaches to pet care.

Future Implications

First of all, the findings of this study can help shape the creation of specialized therapies and support services for those who have lost a pet. Understanding the impact of pet death on mental health, specifically stress, anxiety, and depression, can help mental health experts, veterinarians, and counselors provide appropriate resources, counseling, and grief support suitable to the individual needs of pet owners. These therapies can assist individuals in navigating the grieving process, coping with emotional discomfort, and eventually promoting their overall well-being.

Furthermore, the research may contribute to public health initiatives that promote mental health and well-being among pet owners. Recognizing the significant emotional relationship between humans and their pets, as well as the potential psychological implications of pet loss, might impact pet ownership policies and guidelines. Public health campaigns can raise awareness about the need of pet bereavement assistance, encourage the inclusion of pet loss in mental health discussions, and promote easily accessible services for people dealing with grief and mental health issues.

In addition, study in this field can help to promote a more compassionate and understanding society by decreasing the stigma associated with pet loss and grieving. Recognizing pet bereavement as a severe loss that can have a profound impact on mental health helps foster understanding and support from family, friends, and communities. By recognizing and respecting pet owners' grief, society may create a more supportive atmosphere that promotes healing and emotional well-being.

Finally, veterinarians play an important role in assisting pet owners who have lost a beloved pet. This study's findings can help veterinary practitioners design compassionate grief care guidelines and provide suitable resources to grieving pet owners. Pet bereavement care integrated into veterinary practice can improve the entire experience for pet owners and contribute to the mental health and well-being during the difficult process of pet loss.

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APPENDICES

APPENDIX A
PERMISSION LETTER



Capital University of Science and Technology
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Ref. CUST/IBD/PSY/Thesis-575

August 7, 2023

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Mahnoor, registration number **BSP201004** is a bona fide student in BS Psychology program at this University from Spring 2020 till date. In partial fulfillment of the degree, she is conducting research on "Relationship between pet attachment, pet bereavement and mental health among pet owners". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani
Head, Department of Psychology
Ph No. 111-555-666 Ext: 178
sabahat.haqqani@cust.edu.pk

APPENDIX B.
INFORMED CONSENT

My name is Mahnoor, and I am currently a psychology undergraduate student at the Capital University of Science and Technology. I am conducting research on the relationship between Pet Attachment, Pet Bereavement, and Mental Health, specifically focusing on stress, anxiety, and depression among pet owners. I would like to kindly request your participation in this study. If you decide to take part, you will be asked to complete a set of provided questionnaires. Please be assured that your name and identity will remain completely confidential, as no personal information will be disclosed. Participation in this study is entirely voluntary, and you have the freedom to withdraw at any time should you choose to do so. Your contribution to this research would be greatly appreciated and valuable.

If you have any additional inquiries or need further information about the study, please don't hesitate to reach out to me via email at: mahnoorimdad12@gmail.com

If you have agreed to participate in this study, please sign below:

Participants Name _____

Participants Signature _____

Mahnoor.

Thank you!

APPENDIX C.**DEMOGRAPHIC SHEET**

Age: _____

Gender: _____

Number of Pets Owned: _____

Types of Pets Owned: _____

Have you experienced pet bereavement? (Yes/No)

If yes, how many pets have you lost in the past? _____

How long ago did you experience the most recent pet bereavement? _____ (Please specify in months or years)

APPENDIX D.

QUESTIONNAIRES

PART I

Please read the following statements and express your level of agreement with each statement using a scale ranging from 1 (Disagree Strongly) to 4 (Agree Strongly). These statements are intended to evaluate the emotional impact and grief that you may experience after the loss of a pet.

Sr#	Items	1	2	3	4
1	I feel angry at the veterinarian for not being able to save my pet				
2	I am very upset about my pet's death				
3	My life feels empty without my pet				
4	I have had nightmares about my pet's death				
5	I feel lonely without my pet				
6	I should have known that something bad could have happened to my pet				
7	I miss my pet enormously				
8	I feel very guilty for not taking better care of my pet				
9	I feel bad that I didn't do more to save my pet				
10	I cry when I think about my pet				
11	I am angry at other people for contributing to the death of my pet				

12	I am very sad about the death of my pet				
13	I am angry at my friends/family for not being more helpful				
14	Memories of my pet's last moments haunt me				
15	I'll never get over the loss of my pet				
16	I wish I had shown my pet more love				

PART II

These statements are designed to evaluate the strength of your attachment to your pet. Please indicate your level of agreement with each statement using the following scale:

3 = Strongly agree 2 = Somewhat agree 1 = Somewhat disagree 0 = Strongly disagree

Sr#	Items	1	2	3	4	5
a.	My pet means more to me than any of my friends					
b.	Quite often I confide in my pet.					
c.	I believe that pets should have the same rights and privileges as family members					
d.	I believe my pet is my best friend					
e.	Quite often, my feelings toward people are affected by the way they react to my pet.					
f.	I love my pet because he/she is more loyal to me than most of the people in my life					
g.	I enjoy showing other people pictures of my pet.					
h.	I think my pet is just a pet.*					

i.	I love my pet because it never judges me.					
j.	My pet knows when I am feeling bad.					
k.	I often talk to other people about my pet.					
l.	My pet understands me.					
m.	I believe that loving my pet helps me stay healthy.					
n.	Pets deserve as much respect as humans do.					
o.	My pet and I have a very close relationship.					
p.	I would do almost anything to take care of my pet.					
q.	I play with my pet often.					
r.	I consider my pet to be a great companion.					
s.	My pet makes me happy.					
t.	I feel that my pet is part of my family.					
u.	I am not very attached to my pet.*					
v.	Owning a pet adds to my happiness.					
w.	I consider my pet to be a friend.					

PART III

For each statement, please read and circle a number from 0 to 3 that best represents how the statement applied to you over the past week. Remember, there are no right or wrong answers, and don't spend too much time on each statement. The rating scale is as follows:

0 = Did not apply to me at all

1 = Applied to me to some degree, or some of the time

2 = Applied to me to a considerable degree or a good part of the time

3 = Applied to me very much or most of the time

Sr#	Items	0	1	2	3	4
1	I found it hard to wind down					
2	I was aware of dryness of my mouth					

3	I couldn't seem to experience any positive feeling at all					
4	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)					
5	I found it difficult to work up the initiative to do things					
6	I tended to over-react to situations					
7	I experienced trembling (e.g., in the hands)					
8	I felt that I was using a lot of nervous energy					
9	I was worried about situations in which I might panic and make a fool of myself					
10	I felt that I had nothing to look forward to					
11	I found myself getting agitated					
12	I found it difficult to relax					
13	I felt down-hearted and blue					
14	I was intolerant of anything that kept me from getting on with what I was doing					
15	I felt I was close to panic					
16	I was unable to become enthusiastic about anything					
17	I felt I wasn't worth much as a person					
18	I felt that I was rather touchy					
19	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)					
20	I felt scared without any good reason					
21	I felt that life was meaningless					

